

Work Order ID 152153

Thursday, October 20, 2016 4:09:51 PM

152153

Page 1

Item ID: **D4017-7** Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Rib
 Start Date: 10/21/2016 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 10/24/2016 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: am Date: 10/10/20 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4017	E								
100		0.00							
100									
Large Fab	Memo	0.00							
Large Fab	1- Cut tube as per dwg D4017 2- Deburr and remove identify marks								
110	QC6- Inspect dimensions to drawing	0.00							
110									
QC	Memo	0.00							
Quality Control									
120	Identify as per dwg & Stock Location: <u>WVA 04</u>	0.00							
120									
Packaging	Memo	0.02							
Packaging	LOCATION: WA004								

12 16-11-11

12x DAS 43 9-89 NOV 16 2016

12x DAS 43 9-89 NOV 16 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 152153

Thursday, October 20, 2016 4:09:51 PM

152153

Page 2

Item ID: D4017-7

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Rib

Start Date: 10/21/2016 Start Qty: 12.00 ***12***

Cust Item ID:

Required Date: 10/24/2016 Req'd Qty: 12.00 ***12***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC21- Final Inspection - Work Order Release	0.00							
130							DAS 21		
QC	Memo	0.20					9-39		
Quality Control								NOV 16 2016	

DAS
21
9-39

NOV 16 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval	
Description Work Order Deviation		Disposition				
					Completed By	
					Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐						

Picklist Print

Thursday, October 20, 2016 4:09:51 PM

Page 1

Work Order ID: 152153

152153

Parent Item: D4017-7

D4017-7

Parent Item Name: Rib

Start Date: 10/21/2016

Required Date: 10/24/2016

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP RevA: new issue DD 09.11.26 verified by:EC IPP Rev:B as
per dwg RevA DD 10.03.06 verified by:EC IPP Rev:C as per dwg RevB
DD 10.04.16 verified by:EC IPP Rev:D as per dwg revC DD 10.08.18
verified by:EC IPP Rev:E 11.01.18 chg qc5 to 6 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TS0.750W.049		Purchased	No			100	f	934.2610	0.0675	0.852632			

M304TS0 750W 049

304 SQ Tube .75x.75x.049W

1 5g 16-11-11

Location

Loc Qty

Loc Code

WA004

934.261

M134940

38

M135226

16.261

M135711

480

M135899

400

DQA: _____ Date: _____



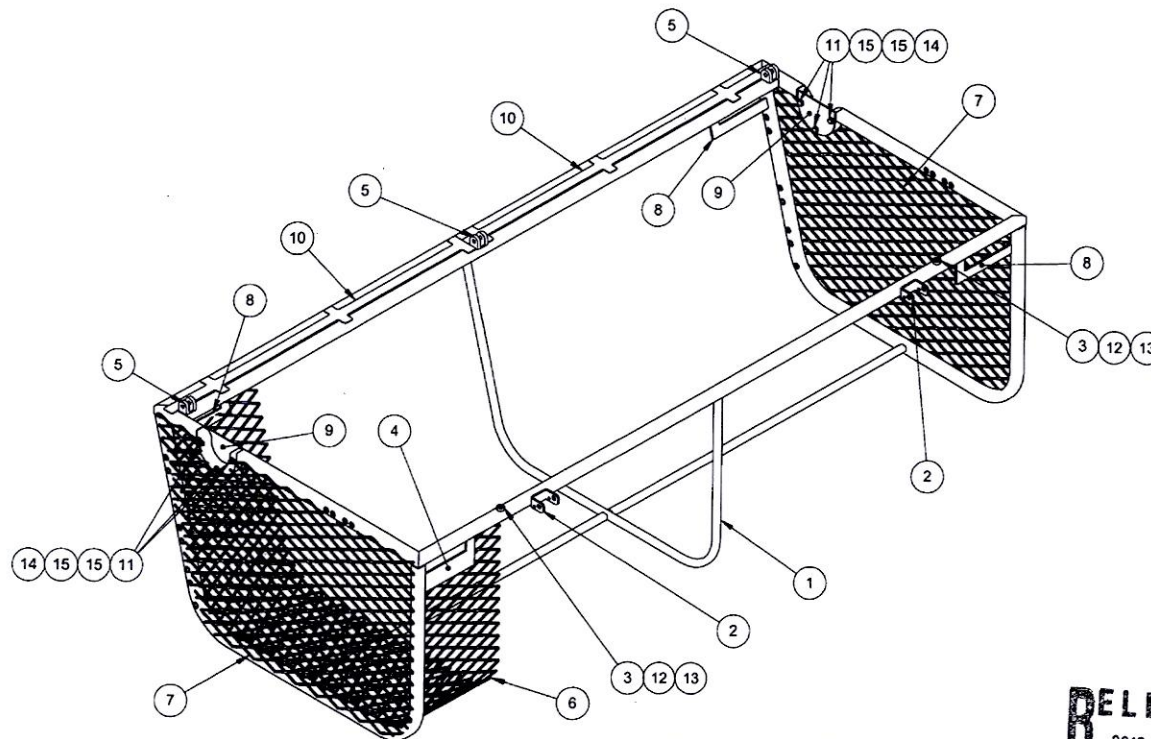
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4017-041	SHORT BASKET ASSY (350)
1	1	D4017-101	TUBULAR ASSY (350 SHORT BASKET)
2	2	D2581	MOUNTING BRACKET
3	2	D2931	BUMPER
4	1	D3913-15	WIDE HANDLE PLATE
5	3	D4016-1	HINGE HALF, BASE
6	1	D4020-3	MESH (350 BASKET SHORT BASE)
7	2	D4020-11	END MESH, BASKET
8	3	D4021-1	HANDLE PLATE
9	2	D4021-5	BLANKING PLATE
10	2	D4672-3	BLANKING PLATE
11	6	AN3-10A	BOLT, MACHINE
12	2	AN960JD8	WASHER
13	2	MS20600AD4W3	RIVET, BLIND, PAN-HEAD
14	6	MS21042L3	NUT, SELF-LOCKING
15	12	NAS1149F0332P	WASHER



D4017-041 SHORT BASKET BASE ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

RELEASED
2013-08-16

**SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT**

**WITHOUT NOTICE
WORK ORDER**

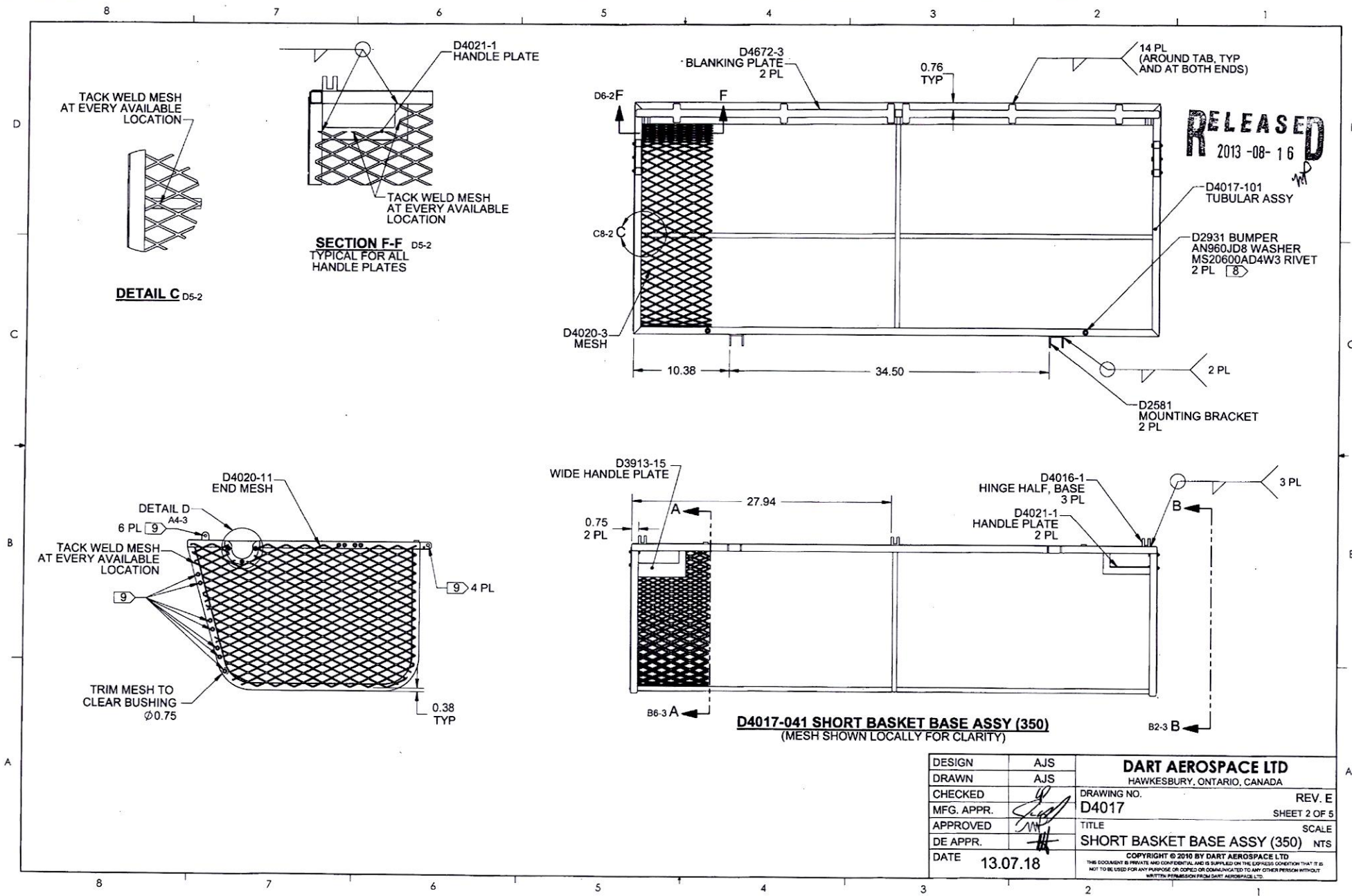
NO. 152153

Em 16/10/21.

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 28.8 lbs APPROX
- 8) INSTALL AFTER FINISH
- 9) MASK HOLES PRIOR TO POWDER COAT
- 10) WELD PER DART QSI 004

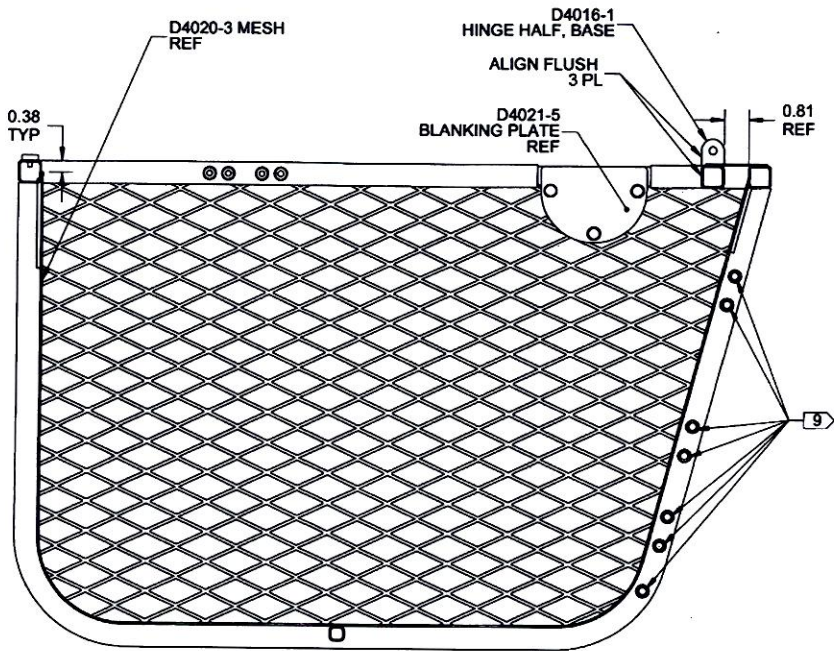
E	PICTORIAL UPDATE TO MULTIPLE VIEWS FOR CHANGES TO D4034-043. A4-4 28.13 DIM IS NOW REF.	AJS	13.07.18
D	ADD D4672-3 (ZN C5-1, D4-1, D6-1, D3-2, AND D4-2). REASON: PART12-197.	MB	12.06.18
C	ITEM #4 NOW INSTALLED OUTBOARD (C4-1, C5-1, B5-2 AND D6-2). REASON: ELIMINATE INTERFERENCE PREVENTING INSTALLATION OF RECEIVER ASSEMBLIES.	MB	10.07.23
B	QTY 1 D4021-1 REPLACED WITH QTY 1 D3913-15; AN3-10A BOLT WAS AN3C10A; NAS1149F0332P WASHER WAS NAS1149C0332R; SECTION F-F UPDATED (D6-2); ITEMS RENUMBERED; DETAIL D UPDATED (A4-S)	JPH	10.03.25
A	NEW ISSUE	AJS	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D4017 REV. E SHEET 1 OF 5 TITLE SHORT BASKET BASE ASSY (350) NTS COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.07.18		



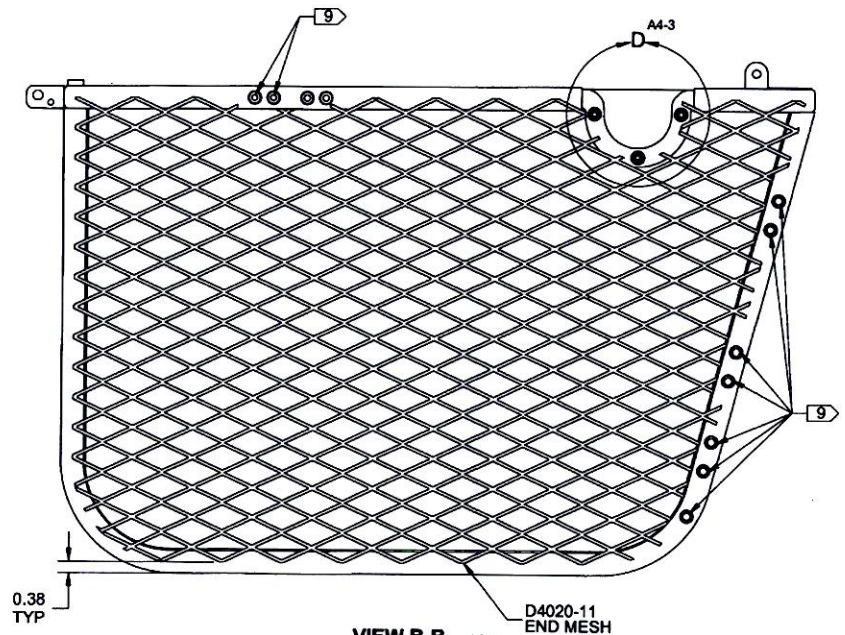
8 7 6 5 4 3 2 1

D
C
B
A

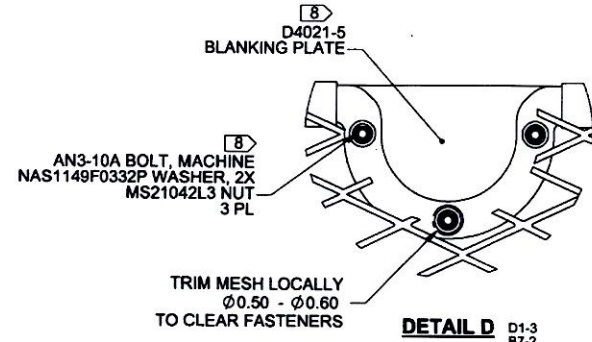
D
C
B
A



SECTION A-A A5-2



VIEW B-B A2-2



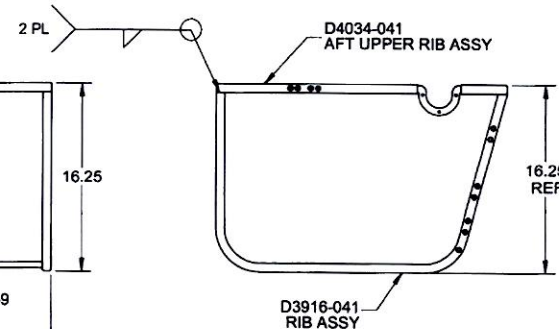
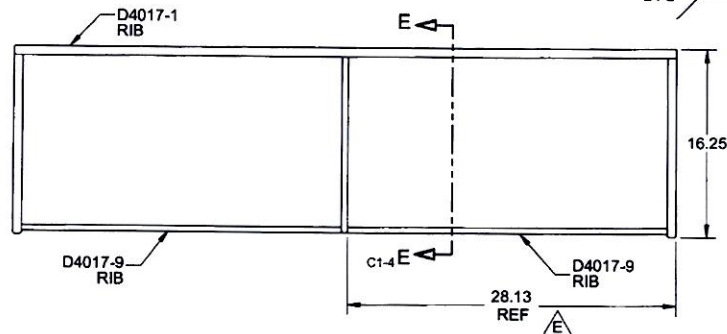
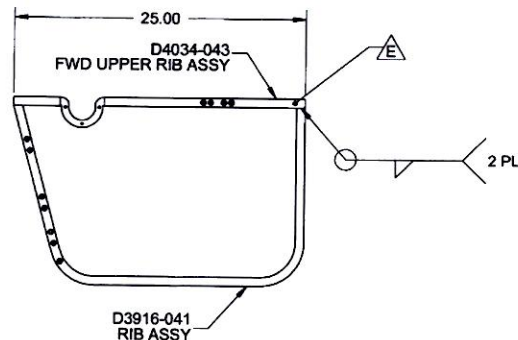
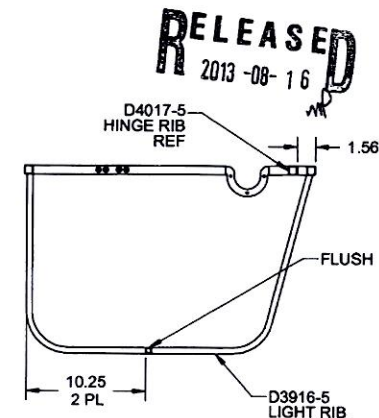
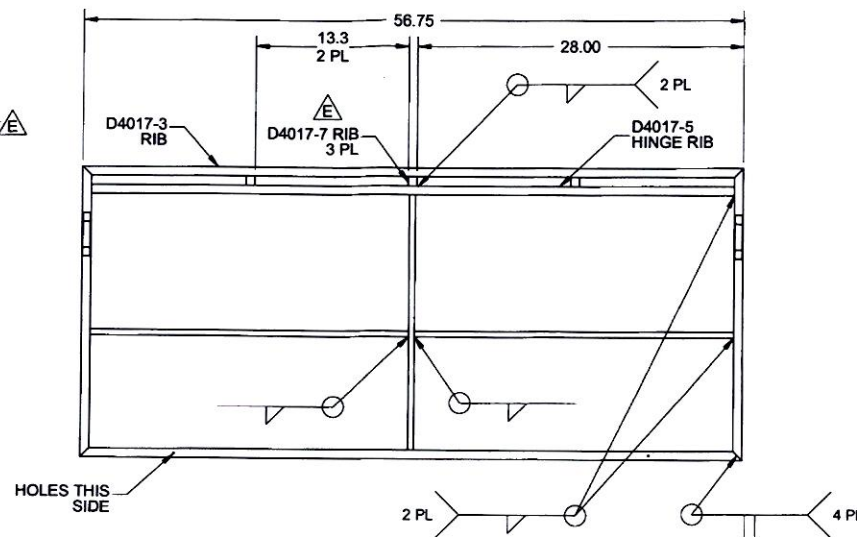
DETAIL D D1-3 B7-2

RELEASED
2013-08-16
MP

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	UP	DRAWING NO.	REV. E
MFG. APPR.		D4017	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET BASE ASSY (350)	NTS
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

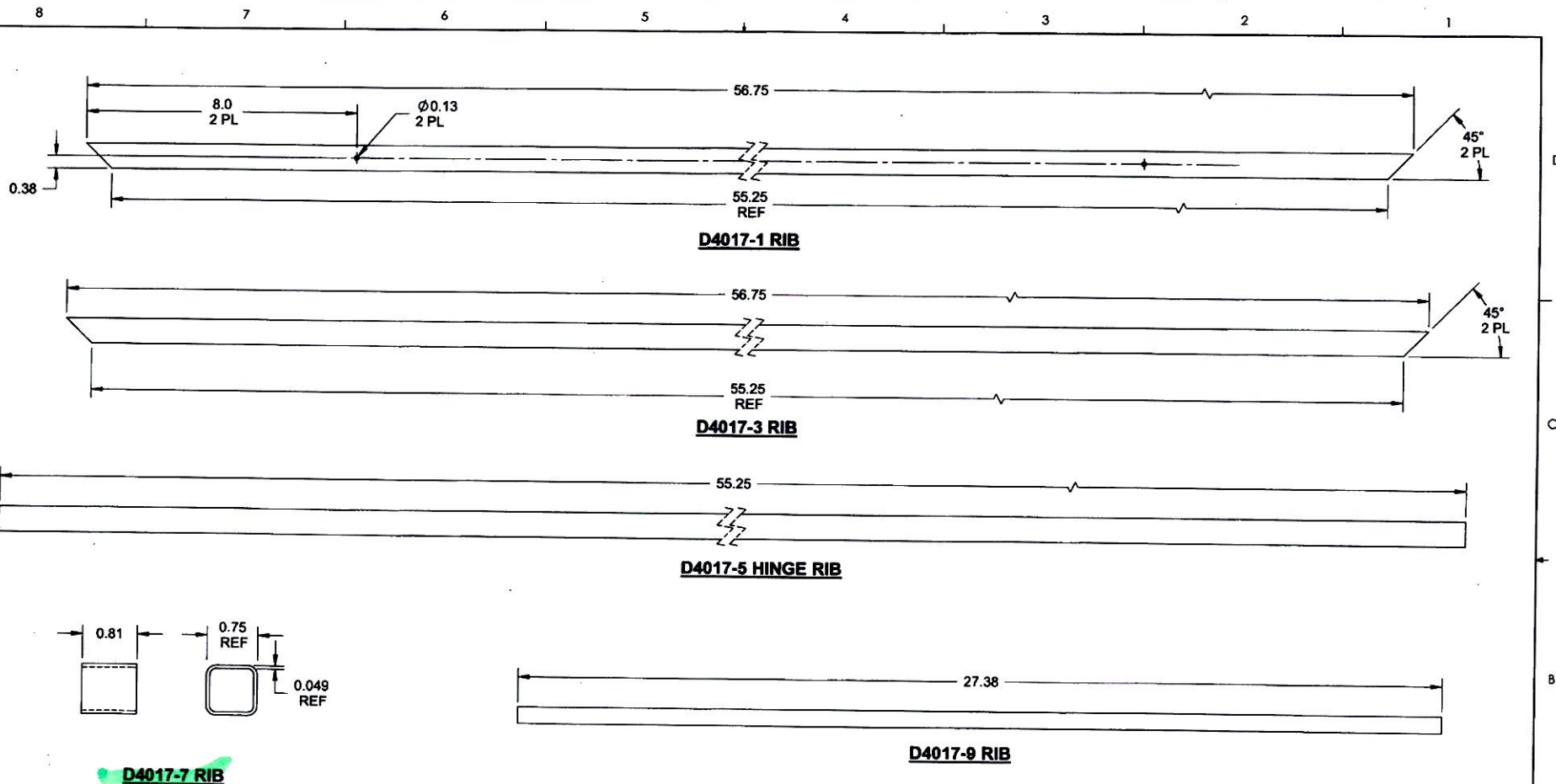
ITEM	QTY -101	P/N	DESCRIPTION
	X	D4017-101	TUBULAR ASSY (350 SHORT BASKET)
1	1	D4017-1	RIB
2	1	D4017-3	RIB
3	1	D4017-5	HINGE RIB
4	3	D4017-7	RIB
5	2	D4017-9	RIB
6	1	D3916-5	LIGHT RIB
7	2	D3916-041	RIB ASSY
8	1	D4034-041	AFT UPPER RIB ASSY
9	1	D4034-043	FWD UPPER RIB ASSY



- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 15.38 lbs
 - 8) TOLERANCE FOR XX.XX DIMENSIONS ± 0.06 FOR D4017-101
 - 9) WELD PER DART QSI 004

D4017-101 TUBULAR ASSY (350 SHORT BASKET)

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>[Signature]</i>	D4017	SHEET 4 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SHORT BASKET BASE ASSY (350)	NTS
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



NOTES:

1) MATERIAL -1 THRU -7: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.750W.049

-9: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.500W.049

- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: SEE ASSEMBLED WEIGHTS

RELEASED
2013-08-16

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO. D4017	REV. E
MFG. APPR.			SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET BASE ASSY (350) NTS	
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	